IN THE CLAIMS

This is a complete and current listing of the claims, marked with status identifiers in parentheses. The following listing of claims will replace all prior versions and listings of claims in the application.

1. (Original) A method of producing a lens cell comprising:

an ES cell maintenance step of maintaining an ES cell by using a medium containing a fibroblast growth factor FGF-2 at a concentration of 2 ng/ml to 50 ng/ml; and

a differentiation inducing step, carried out after the ES cell maintenance step, of inducing differentiation of the ES cell into a lens cell by implanting and culturing the ES cell on a mouse-skull-cell PA6 at a cell density of 2 colonies/cm^2 to 6.5 colonies/cm^2.

2. (Original) A method of producing a lens cell as set forth in Claim 1, further comprising a washing step, carried out between the ES cell maintenance step and the differentiation inducing step, of washing the maintained ES cell once with an ES differentiation medium.

3. (Original) A method of producing a lens cell as set forth in Claim 2, wherein the differentiation inducing medium used for inducing differentiation of the ES cell into a lens cell is

used as the ES differentiation medium.

4. (Currently Amended) A method of producing a lens cell as set forth in ~~any one of~~ Claims ~~1 to 3~~, wherein, in the ES cell maintenance step, the medium contains the fibroblast growth factor FGF-2 at a concentration of 4 ng/ml to 50 ng/ml.

5. (Currently Amended) A method of producing a lens cell as set forth in ~~any one of~~ Claims ~~1 to 4~~, wherein, in the differentiation inducing step, the ES cell is implanted on the PA6 cell at a cell density of 2.5 colonies/cm^2 to 4.0 colonies/cm^2.

6. (Currently Amended) A method of producing a lens cell as set forth in ~~any one of~~ Claims ~~1 to 5~~, wherein the ES cell is derived from primates.

7. (Original) A method of producing a lens cell as set forth in Claim 6, wherein the ES cell is derived from cynomolgus monkey.

8. (Currently Amended) A lens cell obtained by a method of producing a lens cell set forth in ~~any one of~~ Claims ~~1 to 7~~.

9. (New) A method of producing a lens cell as set forth in Claim 2, wherein, in the ES cell maintenance step, the medium contains the fibroblast growth factor FGF-2 at a concentration of 4

ng/ml to 50 ng/ml.

10. (New) A method of producing a lens cell as set forth in Claim 2, wherein, in the differentiation inducing step, the ES cell is implanted on the PA6 cell at a cell density of 2.5 colonies/cm^2 to 4.0 colonies/cm^2.

11. (New) A method of producing a lens cell as set forth in Claim 3, wherein, in the ES cell maintenance step, the medium contains the fibroblast growth factor FGF-2 at a concentration of 4 ng/ml to 50 ng/ml.

12. (New) A method of producing a lens cell as set forth in Claim 3, wherein, in the differentiation inducing step, the ES cell is implanted on the PA6 cell at a cell density of 2.5 colonies/cm^2 to 4.0 colonies/cm^2.

13. (New) A method of producing a lens cell as set forth in Claim 4, wherein, in the differentiation inducing step, the ES cell is implanted on the PA6 cell at a cell density of 2.5 colonies/cm^2 to 4.0 colonies/cm^2.

14. (New) A method of producing a lens cell as set forth in Claim 2, wherein the ES cell is derived from primates.

15. (New) A method of producing a lens cell as set forth in Claim 14, wherein the ES cell is derived from cynomolgus monkey.

16. (New) A lens cell obtained by a method of producing a lens cell set forth in Claim 2.

17. (New) A method of producing a lens cell as set forth in Claim 3, wherein the ES cell is derived from primates.

18. (New) A method of producing a lens cell as set forth in Claim 17, wherein the ES cell is derived from cynomolgus monkey.

19. (New) A lens cell obtained by a method of producing a lens cell set forth in Claim 3.